PERSONAL BACKGROUND, EMIGRATION AND MENTAL DISORDER IN HUNGARIAN REFUGEES

By

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ATTENTION has been focused on the ecological aspects of mental illness since Faris and Dunham (1939) showed a higher incidence of schizophrenia in the centre of Chicago than in its peripheral parts. Earlier, Ødegaard (1932) had described a disproportionately high rate of psychotic breakdowns in Norwegian immigrants to Minnesota and in those who had returned to their homeland after a period of time in the U.S.A.

Malzberg (1940) found a steady progression in the relative incidence of mental diseases with increasing size of population; in particular, the standardized rate of first hospital admissions for schizophrenia was nearly twice as high in the largest cities as in rural districts. More recently, Ødegaard (1945) has analysed the distribution of mental diseases in Norway and has shown that migrants have considerably lower admission rates than those who have remained resident in their community of birth, with the exception however of migrants into Oslo, the capital and largest city, whose rate of hospital admissions was higher than for either of the other two groups. Malzberg and Lee (1956) found that the incidence of schizophrenia in New York State is very considerably higher in migrants, whether foreign or native-born, than in those born in the State.

This brief review of literature indicates that international migrations and, within the same country, centripetal migrations are associated with a higher rate of psychiatric illness, in particular schizophrenia. Concordant as these observations are, their interpretation—and relevance to the aetiological problem in schizophrenia—remains controversial. It has been argued (Faris and Dunham, 1939) that cultural isolation in the "socially disorganized" parts of the city plays a casual role (the "breeder" hypothesis), but others (Ødegaard, 1932) have expressed the view that the migratory process reflected the prepsychotic person's attempt to free himself from social ties and thus solve or evade existing conflicts (the "selection" or "segregation" hypothesis). It has been felt (Hare, 1956) that a study of the history and personalities of the patients might enable one to apportion the relative merits of these interpretations.

The literature hitherto quoted is either based on exclusively statistical data (e.g., Malzberg, 1940) or the retrospective study of an extensive casenote material (e.g., Ødegaard, 1932) where the length of time elapsed since the migration was not always explicit, and the patient's motive for it could not be examined. The recent arrival in England of several thousand Hungarian refugees (after the unsuccessful Hungarian uprising of November, 1956) offered an opportunity to study in detail the earlier life circumstances, and the events surrounding and following the emigration, in cases referred to a special psychiatric clinic for Hungarian refugees at the Maudsley Hospital. We hoped that an analysis of personality and environmental factors might

permit of more definite conclusions than hitherto possible regarding the relationship of these to different forms of mental illness. It was postulated that, if the "selection" hypothesis accounts for the higher incidence of schizophrenia in immigrants, those who break down with this form of mental illness should be distinguishable in terms of their pre-emigration characteristics.

CASE MATERIAL

The data relative to 82 consecutive Hungarian refugees, referred for psychiatric disorders from 1 February, 1957, to 31 January, 1959, have been analysed. The large majority of these cases have been examined at the Maudsley Hospital, but a few were seen elsewhere at the request of other hospitals or Government agencies. The age and sex distribution, and the clinical features of these cases have been described elsewhere (Mezey, 1960). For the purposes of this investigation the case material has been divided into four groups according to diagnosis: (1) Schizophrenic disorders, including schizo-affective illness and paranoid states, 14 cases; (2) Affective disorders, including depressive states (Garmany, 1958) and a single case of hypomania, 23 cases; (3) Personality and neurotic disorders (Mayer-Gross, Slater and Roth, 1954), 41 cases; and (4) Organic disorders, including one case of mental deficiency, 4 cases.

The patients were referred by hospitals, general practitioners, Refugee Welfare organizations, official channels, and there were a few cases of self-referral. To exclude selection bias, the patients were compared in respect of their mode of referral (Table I).

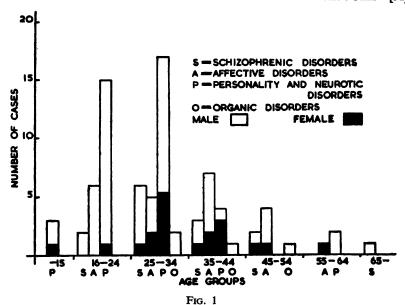
The initial interview and examination took two hours on the average and it was endeavoured in every case to obtain independent information regarding history and symptomatology of the patient. Relatives and friends were interviewed and further information was sought from Hungary through correspondence with relatives and hospitals. The information obtained was graded satisfactory if independent account could be obtained about the most important points of history, and incomplete if the independent information available covered only a small period of the patient's life, or none was available. Satisfactory information was thus collected in 65 cases (79·2 per cent.) and the history remained essentially uncorroborated in 17 cases (20·8 per cent.) (Table I).

The age and sex distribution of the patients for the four diagnostic groups is given in Fig. 1.

RESULTS

Childhood and Marital Status

Disruption of family life before the end of adolescence, with its social and psychological consequences, is believed to be associated with a high incidence of abnormal personality development and delinquency. Its relationship to other forms of mental disorder is more controversial. Thus Lidz and Lidz (1949) found that 40 per cent. of a group of schizophrenics had been deprived of at least one parent before their 19th birthday, as opposed to only 17 per cent. of their normal control group. Oltman, McGarry and Friedman (1952) have examined their problem on a much larger case material and found that about one-third of schizophrenics, manic-depressives and normal controls have all had a history of "broken home", while the proportion rose to nearly one-half of cases among psychopathic personalities and psychoneurotics.



Age and sex distribution of the patients for the four diagnostic groups.

On account of the difference in the cultural background, the age of 16 was taken as the end of adolescence for our Hungarian patients, and broken home defined as withdrawal of one or both parents before attaining this age, owing to the death of one (19 cases) or both parents (3 cases), divorce or separation of parents (5 cases) and illegitimacy and/or institutional upbringing (6 cases) (Table I).

Ødegaard (1946 and 1953) has conclusively shown that the much higher incidence of mental diseases in the single than in the married is due primarily to "selection by marriage", certain personality traits reducing the chances of getting married. The death of the spouse does not lead to any considerable change in this positive selection, while in the divorced the incidence of psychosis is nearly as high as in the single. The marital status of our patients was: 42 single, 18 married, 4 widowed and 18 divorced or separated (Table I).

Previous Migratory Record

Studies of internal and international migrations have been pursued independently and we wished to investigate on this case material the relationship between the previous migratory record in Hungary of our patients, and their subsequent migration abroad.

Residence at birth of our patients was Budapest, the capital, in 42.7 per cent. of cases, and elsewhere in Hungary in the remainder. The majority of patients (66.9 per cent.) resided in Budapest at the time of their leaving Hungary and only 33.1 per cent. were living in other parts of the country (Table I).

Slightly more than half (52·1 per cent.) of our cases had migrated from one part of Hungary to another, the rest having stayed until the time of emigration at the place of their birth. Among those who had migrated, 23 patients went to live in Budapest, and 14 migrated from one country area to another, or from Budapest to the country. In view of the differential psychiatric morbidity depending on the direction of migration found by Ødegaard (1945)

TABLE 1

×d C	Z.	N.S.	N.S.	Z.S.	Z.S.	N.S.	0.01	Z.S.	0 · 001	Z.S.	Z.S.
χ^{2} (d.f. = 3)	5.73	3.85	1 · 87	1 · 18	6.47	1 · 54	11.6	5.49	17.81	1.12	.23
Organic Disorders	77	41	77	e -	3 -	77	1 8	- r	e -	3 1	13
Personality and Neurotic Disorders	16 25	35	19	33	20	24 17	35	32	28 13	13 28	29 12
Affective Disorders	16	41	8 15	13	112	18 5	7 16	8 15	10	9 41	17 6
Schizo- phrenic Disorders	∞ ∘ : :	.: 22	 4 01	. :	12	: : e &	: : e	: : 41	12	11	.: 3
	ral Medical (or self) Welfare (or official)	idependent information Yes	e" Yes	Single, divorced or separated Married or widowed	birth Budapest Provincial	emigration Budapest Provincial	Direction of previous migration To Budapest Other (or none)	Emigration previously considered Yes	nigration Political (or partly political) Non-political	emigration Relative or friend None	class 0
	Mode of referral	Satisfactory independent inf	"Broken home"	Marital status	Residence at birth	Residence on emigration	Direction of p	Emigration pr	Motive for emigration	Companion in emigration .	Fall in social class

in Norway, we divided our patients into those who had migrated from the country into Budapest, and those whose previous internal migration was in another direction, or who had no previous record of migration. The differences between the groups are highly significant and showed a high number of schizophrenics who migrated to Budapest (Table I).

Motivation for leaving Hungary

All these patients had left Hungary during, or immediately following, the uprising of November, 1956. It could not be assumed, however, that they had all left their country for political reasons. Since the beginning of this century, at least, a steady stream of emigrants have left Hungary for the countries of the West, particularly the United States. In 1913 this emigration reached its peak with 117,580 voluntary migrants to the U.S.A. alone within a calendar year, from the then territorially much larger Hungary (Epstein, 1914). Between the two world wars this emigration was artificially kept in check by limitation of intake in the countries of destination (in particular, the quota laws of the U.S.A.), and after the second world war through the great difficulties of leaving the country of origin by legal means. However, the process of westward migration was never entirely halted. The revolutionary period, which swept away the local hindrances to emigration and, at the same time, created greater willingness in the countries of destination to admit Hungarians, offered a favourable opportunity to leave for all those who might have emigrated in any case, circumstances permitting. Hoff and Strotzka (1958) distinguished four different groups of Hungarian refugees according to their reasons for emigration, only one of them being political; they did not give, however, quantitative data regarding the relative size of these groups. It has been estimated (Hinkle, 1958) that before the start of the uprising more than 50 per cent. of refugees had considered leaving Hungary at the first opportunity. We have systematically inquired in every case about the circumstances leading to emigration and, in particular, we have tried to establish whether it was planned or considered before the uprising, or whether it was born of the situation reigning at the time of the internal upheaval. Although none of our schizophrenic patients contemplated emigration prior to the uprising, the differences between the groups remain just short of statistical significance (Table I).

We have further tried to elicit in every case the reasons that prompted the decision to leave Hungary. The answers given were divided into Political, Partly-Political and Non-Political Motivation. The Political motivation (28 per cent. of cases) included cases where the patient had taken no part whatsoever in the uprising, and sometimes even lived in a part of the country not touched by it, but who had political objections to the régime or had to suffer from its economical or other consequences; in the same category belong certain Jewish patients alarmed by the renewal of anti-Semitism in the revolutionary period. Non-Political Motivation (55 per cent. of cases) included Economic reasons (unconnected with political opposition to the régime),) e.g. to work in the West traditionally regarded as offering a higher standard of living, Domestic reasons, e.g., to escape from a father regarded as a bully, to avoid paying maintenance to an estranged wife, to put an end to an intolerable marital situation, etc., and Personal, which included a large variety of reasons from seeking adventure and seeing the world to looking for more efficient medical treatment (a case of Myasthenia gravis), and purely chance decisions without forethought or apparent reason. The frequency of these different motivations between the diagnostic categories is very significantly different (Table I). Elimination of the schizophrenic group from the statistical comparison reduces the probability below significance ($\chi^2=4.14$; d.f.=2; p<0.2), thus proving that the significance is due to the discrepancy between observed and expected scores in schizophrenics.

The patients were divided into those who had left Hungary in the company of a relative or very close friend, and those who undertook emigration alone, or accompanied only by chance acquaintances. The diagnostic groups do not differ significantly in this respect (Table I).

Social Mobility

The relationship between social structure and mental illness has been the subject of several recent investigations (Hollingshead and Redlich, 1954 and 1955; Hare, 1955; Ødegaard, 1956; Stein, 1957). In a considerable proportion of cases the situation of a recent immigrant is that of a *déclassé*, and we wished to investigate the bearing of this downward social mobility on the different diagnostic groups of our case material.

Because of the differences in the socio-economic and political structure of the two countries, certain occupations do not carry corresponding prestige or financial rewards. In order to avoid gross errors of classification we have therefore grouped our patients in three large social classes; these were Class A, analogous to Class I, Class B, corresponding to Classes II and III, and Class C, corresponding to Classes IV and V of the Registrar-General's Classification. The social class distribution of our patients in the two countries was as follows:

			TABLE	II					
Social	Schizop disore		Affec disorc		Persona and neu disord	rotic	Organic disorders		
Class	Hung	. Eng.	Hung.	Eng.	Hung.	Eng.	Hung.	Eng.	
Class A	 1	_	3	1	_	_	_	-	
Class B	 6	4	16	12	22	12	2	1	
Class C	 7	10	4	10	19	29	2	3	

The four diagnostic categories did not differ significantly in the frequency of their respective social mobility (Table I).

Social Adaptation

Adaptation or adjustment is a term of many meanings (Kahn, 1938; Lewis, 1953) and is sometimes used indiscriminately in psychiatric literature. For the purposes of this paper we have adopted the operational definition of Barrabee, Barrabee and Finesinger (1955), according to which, an individual is adjusted if he is satisfactorily fulfilling the normative social expectations of his role as husband, father, worker, etc., and independently of whether he regards them as entirely satisfactory. Social adaptation was rated in seven areas (Family, School, Sexual, Marital, Work, Social and Recreational, and Community) following the criteria of Brill and Beebe (1955). We have assessed the relative degree of maladaptation of every patient, both in Hungary and in England, in order to compare the change subsequent to migration abroad

624 EMIGRATION AND MENTAL DISORDER IN HUNGARIAN REFUGEES [April and its possible relevance to the causation of the particular form of mental illness here investigated.

			TABLE	III				
Areas of	Schizophrenic disorders Hung. Eng.			ctive rders	Person and neu dison	ırotic	Organic disorders	
Maladaptation			Hung	Eng.	Hung. Eng.		Hung. Eng.	
Family	3	1	3	2	19	8	_	_
School	5	-	2	_	18	1	1	_
Sexual	5	5	7	12	13	16	_	-
Marital	3	3	7	2	12	7	1	_
Work Social and	4	2	1	4	21	26	2	-
Recreational	5	8	1	11	24	29	_	1
Community	1	2	1	1	9	11	1	1
Totals		21	22	32	116	<u></u>	5	3

It is only the patients suffering from affective disorders whose apparent social adaptation deteriorates and might be presumed to play a part in the aetiology of their illness. The increase in maladaptation of these patients is due to difficulties in social and recreational activities and, to a lesser extent, in work and sexuality.

The assessment of social adaptation by counting the areas in which it is defective might prove misleading; if a patient has reduced the number of maladapted areas by the very fact of emigration (e.g., separation from family) or by the ordinary process of growth (e.g., after leaving school) the improvement registered in social adjustment is spurious. Thus the diminished total figure for maladaptation in England, as compared with Hungary, in schizophrenics and personality disorders can be accounted for by the difference in the respective scores for adaptation to school. To avoid this source of error we have devised an Index of Social Adaptation (I.S.A.).

Method

The patient's adaptation is rated either "good" (or "adequate"), or "poor" for all areas where rating is appropriate, and the Index is calculated from the ratio of the number of maladapted areas to the number of areas where adaptation was rated. Examples:

Mr. L.V., aet 34. Diagnosis: Depressive Illness. Social adaptation in Hungary: Family: good. School: good. Sexual: good. Marital: good. Work: good. Social and Recreational: good. Community: good. I.S.A.: Number of maladapted areas/Number of areas rated=0/7=0. Social adaptation in England: Family: (left in Hungary). School: —. Sexual: poor (constant preoccupation). Marital: (wife left in Hungary). Work: good. Social and Recreational: poor (avoids social contacts). Community: good. I.S.A.: Number of maladapted areas/Number of areas rated=2/4=0.5.

Mr. H.S., aet 42. Diagnosis: Chronic mixed neurosis. Social adaptation in Hungary: Family: poor (conflict)). School: good. Sexual: poor (frigidity). Marital: poor (divorce). Work: adequate. Community: good. I.S.A.: Number of maladapted areas/Number of areas rated=3/7=0.42. Social adaptation in England: Family: poor (insulting behaviour). School: —. Sexual: poor (frigidity). Marital: —. Work: adequate. Social: adequate. Community: good. I.S.A.: Number of maladapted areas/Number of areas rated=2/5=0.40.

The difference in mean I.S.A. in Hungary distinguishes significantly Affective from Schizophrenic disorders (S.E.=0.072; t=4.58; p<0.001), Affective from Personality (and neurotic) disorders (S.E.=0.068; t=3.48; p<0.001), as well as Schizophrenic from Personality (and neurotic) disorders (S.E.=0.091; t=2.54; p<0.02).

The change in the means of I.S.A. subsequent to emigration for the different groups is given in the following table:

TABLE	IV
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Diagnostic Category]	Hungary	England	Difference	S.E.	t	p<
Schizophrenic disorders		0.271	0.39	0.119	0.08	1.49	0.2
Affective disorders Personality		0·171	0.311	0.14	0.053	2.64	0.02
& neurotic disorders		0.501	0.569	0.068	0.025	2.72	0.02

By this method the deterioration of social adaptation in affective disorders is confirmed: the ratio of maladapted areas to total number of areas rated increasing from about 1/16 to nearly 1/3, a statistically significant difference. The difference in the means of the Indices for the two countries is more discrete in the schizophrenic group, the respective ratios being approximately 1/4 and 2/5, and not significant. The deterioration in adaptation subsequent to emigration, as measured by the rise of the Index of Social Adaptation is actually very small for personality and neurotic disorders—from 1/2 to 10/18 approximately—but nevertheless statistically significant.

DISCUSSION

There was a history of early disruption of the home in 40 per cent. of Hungarian refugees referred for psychiatric disorders. In the absence of comparable data, it is not possible to evaluate the significance of this figure. The only reference we were able to find was one reporting a history of broken home in 54 per cent. of cases of accident-prone patients in Budapest (Csillag and Hedri, 1949). Whether the percentage of this family constellation is characteristic of Hungarian refugees with psychiatric disorders, or for the parent population as a whole, it remains that within our case material the differences between the diagnostic groups were not significant.

Our case material also appeared fairly homogeneous in respect of marital status. This statement has to be qualified, however, as available numbers did not allow detailed statistical analysis, and marital status had to be examined in two large categories of (a) single, divorced or separated, and (b) married or widowed. Furthermore, the figures were not standardized for age.

A comparison of the previous migratory record of these patients revealed a relationship between the direction of their earlier migration in Hungary and the type of psychiatric disorder they were suffering from when seen in England. While there was no significant difference between the groups regarding their Hungarian residence at birth, or immediately prior to emigration, schizophrenic patients had emigrated from the country to Budapest in a significantly higher proportion of cases than those belonging to other diagnostic categories.

The study of our patients' motivation for leaving Hungary shows interesting features. Only 22 per cent. had previously planned, even vaguely, to emigrate, and in the remainder this important decision was born in the chaotic circumstances of the uprising. In particular, none of the schizophrenic patients had earlier contemplated going abroad. However, the difference between the groups remains short of the usual criterion of statistical significance. The immediate motive for leaving Hungary was political, or partly political, in about 45 per cent. of cases. When the figures were statistically analysed, the frequency of non-political motives was significantly higher in those having a schizophrenic illness than for other diagnoses.

A fall in social class subsequent to emigration was observed in more than a quarter of our cases, but its frequency was not significantly different between the groups. It will be appreciated, however, that the method of social classification adopted, while necessary in the interests of accuracy, was of a type likely to mask finer differences in social mobility.

The comparative analysis of the social adaptation of our patients, before and after emigration, showed that those with affective disorders had suffered a considerable, and statistically significant, deterioration, while the Index of Social Adaptation of schizophrenics in England did not significantly differ from their earlier Hungarian Index. Except in affective disorders, it is difficult therefore to ascribe aetiological importance to the stresses of emigration in the causation of the psychiatric disorders of our patients. Sociologists have used the evocative terms of "marginal men" (Park, 1928) and "stranger" (Schuetz, 1944) to describe the predicament of the migrant, faced with a dislocation of his habitual system of reference. Our data do not lend support to the thesis (Faris, 1934) that cultural isolation subsequent to migration plays a decisive part in shaping the schizophrenic personality; the assessment of the pre-migratory social adaptation in these cases showed that they tended to be "marginal" people already in Hungary. The frequent history of earlier migration to Budapest, the predominantly non-political motives for emigration undertaken without any previous planning, indicated in fact that their maladaptation had been the major reason for leaving Hungary. In these respects they were clearly distinguishable from other diagnostic groups, confirming therefore the initial deduction from the "selection" hypothesis.

SUMMARY

The family circumstances, previous migratory record, motives for emigration, social mobility and social adaptation of 82 consecutive cases of Hungarian refugees with psychiatric disorders, divided into four diagnostic categories, have been investigated.

The groups did not differ in respect of the frequency of a "broken home" background, marital status and the downward social mobility subsequent to emigration.

Schizophrenics differed significantly from other diagnostic groups in their higher previous record of migration from rural and provincial areas to Budapest, and the higher frequency of non-political motives for leaving Hungary. The mean Index of Social Adaptation deteriorated significantly in England for those suffering from affective disorders, but not for schizophrenics, and it is concluded that, in the two year period covered by the investigation, the stresses of emigration did not play an important causal role in schizophrenic illnesses.

These findings support the "selection" (or "segregation") hypothesis" in the interpretation of the differential incidence of schizophrenia in migrants.

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